Chapter 5
Enforcement Progress

The Agency uses the enforcement provisions of CERCLA, as amended by SARA, to maximize the involvement of potentially responsible parties (PRPs) in the cleaning up of Superfund sites. The Agency's enforcement goals are to

- Maintain high levels of PRP participation in conducting and financing cleanups through EPA's aggressive use of statutory enforcement authority;
- Ensure fairness and equity in the enforcement process; and
- Recover Superfund monies expended by EPA for response actions.

FY94 accomplishments illustrate the continuing success of EPA's Superfund enforcement efforts. EPA achieved enforcement agreements worth more than $1.4 billion in PRP response work. PRPs financed approximately 75 percent of the remedial designs (RDs) and remedial actions (RAs) started during the fiscal year. Through its cost recovery efforts, EPA achieved over $206 million in settlements and collected more than $200 million for reimbursement of Superfund expenditures. The Agency collected over $5.7 million in CERCLA penalties.

Under the Superfund administrative improvements initiative, the Agency reinforced its goal to ensure fairness in the enforcement process by reducing transaction costs and accelerating the pace of cleanups. Efforts included increasing the use of allocation tools, encouraging early settlements with *de minimis* and "de micromis" parties, fostering greater fairness for owners and prospective purchasers of Superfund sites, and evaluating increased use of mixed funding. Implementing other administrative improvement measures, the Agency also worked to enhance compliance monitoring, increase the effectiveness of cost recovery efforts, and implement the Superfund Accelerated Clean-Up Model (SACM). As it implemented SACM to streamline cleanup and accelerate risk reduction the Agency worked to streamline and expedite enforcement activities.

5.1 The Enforcement Process

The Superfund program integrates enforcement and response activities. To initiate the enforcement process, EPA identifies PRPs, notifies them of their potential liability, and seeks to negotiate an agreement with them to perform or pay for the cleanup. If an agreement is reached, the Agency oversees the work performed under the legal settlement. If the PRPs do not settle, EPA may issue a unilateral administrative order (UAO) compelling them to perform the cleanup. If PRPs do not comply with the UAO, EPA may conduct the cleanup using Superfund monies and pursue cost recovery action against the PRPs for costs incurred. These steps are fundamental to obtaining PRP involvement in conducting response activities and recovering expended Trust Fund monies. The enforcement process is explained in more detail below:

- When a site is being proposed to the National Priorities List (NPL), or when a removal action is required, EPA conducts a PRP search to identify parties that may be liable for site cleanup and to collect evidence of their liability. PRPs include present and past owners or operators of

a site, generators of waste disposed of at a site, and transporters who selected the site for the disposal of hazardous waste.

- EPA notifies parties of their potential liability for future response work and for any past response costs incurred by the government, thus beginning the negotiation process between the Agency and the PRPs.
- EPA encourages PRPs to settle and undertake clean-up activities, specifically to start removal actions, remedial investigation/feasibility studies (RI/FSs), or remedial design/remedial action (RD/RAs). If PRPs are willing and able to do the response work, the Agency will attempt to negotiate an agreement allowing the PRPs to conduct and finance the proposed clean-up work and to pay for past government costs. For RD/RAs, the settlement must be in the form of a judicial consent decree (CD) that is lodged with a court by the Department of Justice (DOJ). For other types of response actions, the agreement may be in the form of a CD or an administrative order on consent (AOC) issued by an EPA Regional Administrator. Both agreements are enforceable in a court of law. Under either agreement, PRPs conduct the response work under EPA oversight. PRPs who settle may later seek contribution toward the cleanup from non-settling PRPs by bringing suit against them.
- EPA also may use a cash-out settlement to reach an agreement with PRPs. A cash-out settlement is a type of mixed funding settlement that requires PRPs to provide substantial up-front financing toward the cost of a site cleanup that will be conducted by EPA or other PRPs. Cashout settlements also may include a premium to partially offset EPA's risk due to uncertainties, such as remedy failure or cost overruns.
- If negotiations do not result in a settlement, CERCLA Section 106 provides EPA with the authority to issue a UAO requiring the PRPs to conduct the cleanup; EPA may also bring suit through DOJ to compel PRPs to perform the work. If the Agency issues a UAO and the PRPs do not comply, the Agency again has the option to file a lawsuit to compel the performance specified in the order (and to seek penalties up to $25,000 per day) or to perform the work itself and then seek cost recovery and treble damages.
- If the site is cleaned up using Superfund monies, EPA will file suit through DOJ, when practicable, to recover monies spent. Many of these suits to recover past costs will also include EPA claims for estimated future costs. Any money recovered from the PRPs is returned to the Trust Fund.

5.2 Fiscal Year 1994 Progress

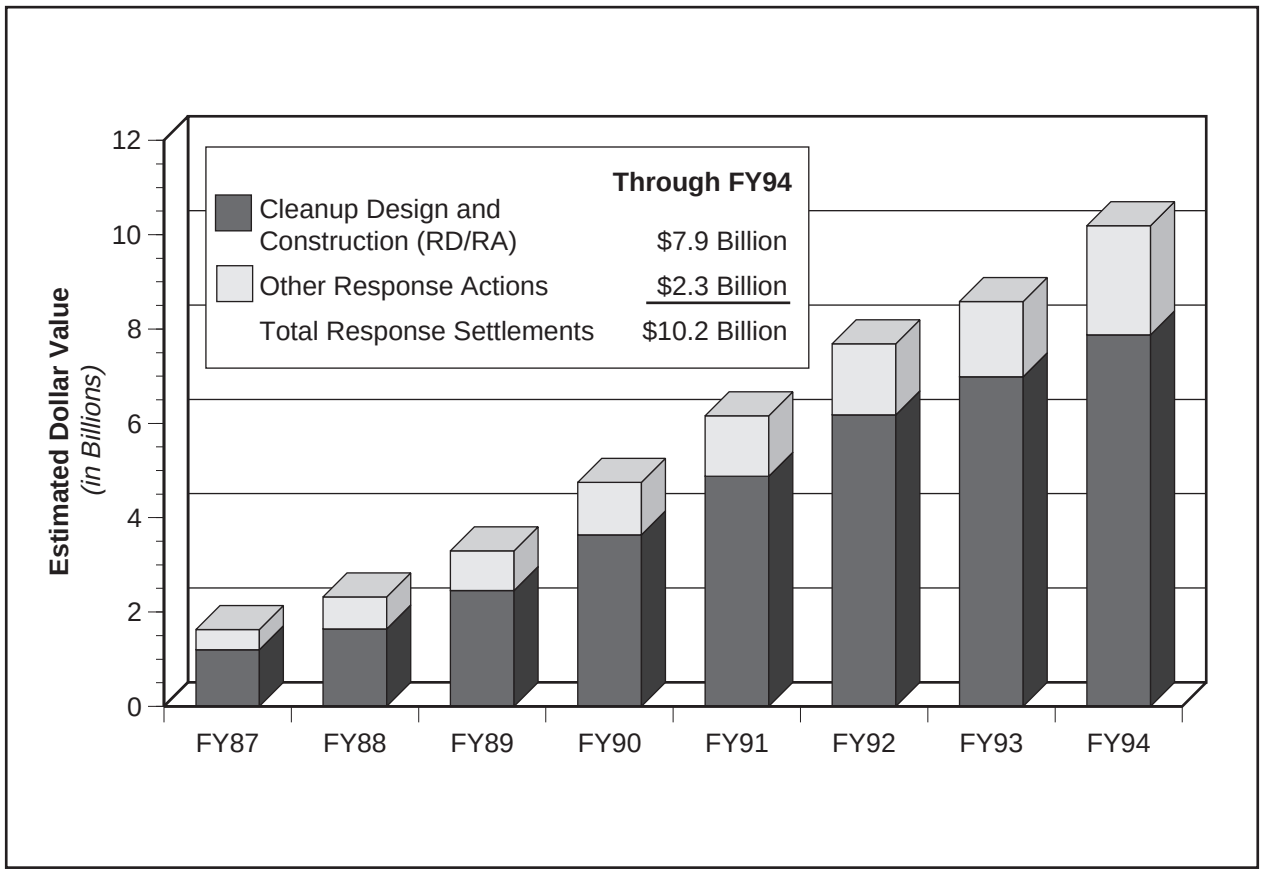
FY94 progress reflects the continuing success of Superfund enforcement efforts to secure PRP participation in undertaking Superfund cleanups and in recovering Trust Fund monies expended by EPA in its response efforts.

5.2.1 Settlements for Response Activities

During FY94, the Agency reached 230 settlements (CDs, AOCs, or UAOs in compliance) with PRPs for response activities worth over $1.4 billion. As shown in Exhibit 5.2-1, the cumulative value through FY94 of PRP response settlements achieved under the Superfund program exceeds $10 billion. (Although UAOs strictly speaking are not settlements they are included in this category if the PRP notifices the Agency of their intent to comply with the order and perform the required work under the order.)

Of the 230 response settlements achieved in FY94, 88 settlements worth almost $960 million were for RD/RAs. These RD/RA settlements included 35 CDs referred to DOJ for approximately $585 million, 18 AOCs for almost $80 million, and 35 UAOs in compliance for more than $295 million. These RD/RA settlements are the result of 58 RD/RA negotiations started and 82 RD/RA negotiations

Exhibit 5.2-1
Cumulative Value of Response Settlements Reached with Potentially Responsible Parties



Source: CERCLIS.

51-044-14

completed by EPA during the fiscal year.

During FY94, the Agency issued 110 UAOs, including 42 for RD/RAs. The Agency also signed 154 AOCs. The 110 UAOs issued and 154 AOCs signed include agreements for removal actions, RI/FSs, RDs, and RD/RAs.

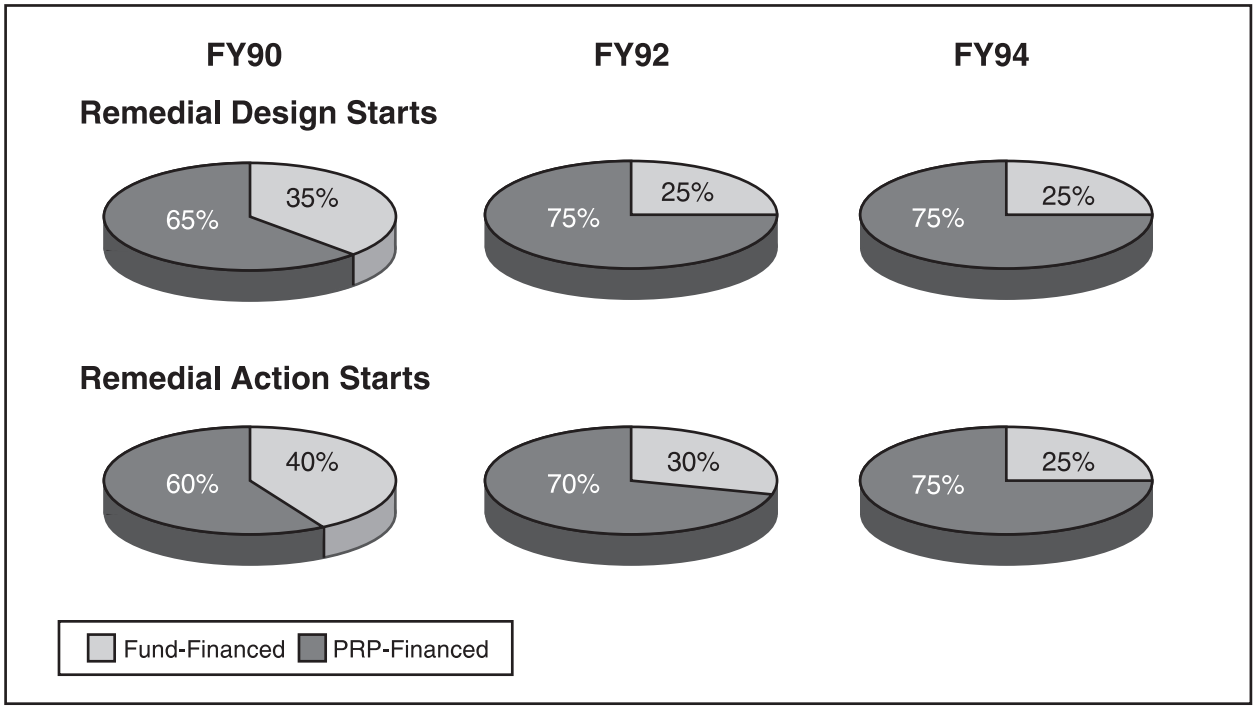
5.2.2 PRP Participation in Clean-up Activities

Exhibit 5.2-2 illustrates the continuing high level of PRP participation in undertaking and financing RDs and RAs since the implementation of the "enforcement first" initiative in 1989. In FY94, PRPs continued to finance and conduct a high percentage of the remedial work undertaken at Superfund sites: 75 percent of new RDs, 75 percent of new RAs, and 46 percent of new RI/FSs.

5.2.3 Cost Recovery Achievements

Through pursuit of cost recovery actions, EPA and DOJ reached 237 settlements worth more than $206 million. The FY94 cost recovery settlements represent over 14 percent of the total $1.4 billion achieved in cost recovery settlements since the inception of Superfund. More than 70 percent of the total $1.4 billion has been achieved in the past five

Exhibit 5.2-2
Increase in the Percentage of Remedial Designs and Remedial Actions Started by PRPs



Source: CERCLIS.

51-044-16

years. Exhibit 5.2-3 illustrates cost recovery settlements collected to date.

EPA collected over $200 million through cost recovery settlements, bankruptcy settlements, and other sources during the fiscal year. These FY94 collections represent more than 20 percent of the approximately $934 million collected by EPA to date; more than 80 percent of the $934 million has been collected in the past five years.

5.2.4 Success in Reaching and Enforcing Agreements with PRPs

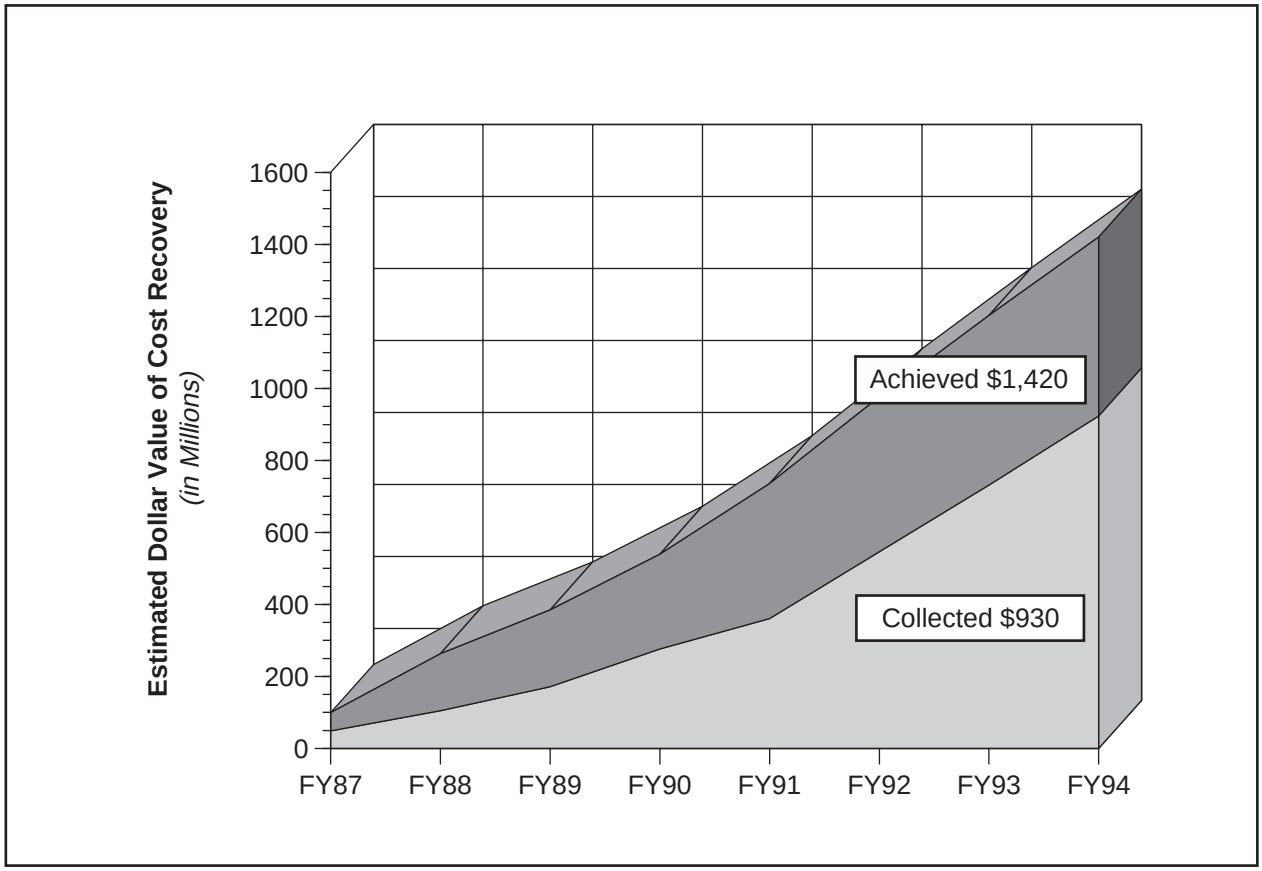
During FY94, the EPA Offices of Regional Counsel and Regional Waste Management Divisions, working in conjunction with the Office of Enforcement and Compliance Assurance (OECA) and DOJ, entered into numerous enforcement agreements with PRPs. Exhibit 5.2-4 highlights a cross section of the most successful enforcement settlements reached during the fiscal year.

5.3 Enforcement Initiatives

During FY94, the Agency's Headquarters enforcement offices went through a major reorganization. Superfund enforcement, which was formerly administered through the Office of Waste Programs Enforcement, was shifted to the new Office of Site Remediation Enforcement - Superfund Division within OECA. The reorganization had little impact on program progress, and ongoing Superfund enforcement activities continued under the new organization.

As recommended by the Superfund Administrative Improvements Task Force, the

Exhibit 5.2-3
Cumulative Value of
Cost Recovery Dollars Achieved and Collected



Source: CERCLIS.

51-044-13A

Agency engaged in efforts to promote equity in the enforcement process. FY94 activities were focused on increasing the use of allocation tools such as alternative dispute resolution (ADR), encouraging early settlements with *de minimis* and "de micromis" parties, fostering greater fairness for owners and prospective purchasers of Superfund sites, and evaluating the increased use of mixed funding. Also, as recommended by the task force, the Agency continued efforts to improve compliance monitoring efforts, enhance cost recovery efforts, and implement SACM.

5.3.1 Greater Use of Allocation Tools

During FY94, the Agency worked to promote greater use of allocation tools and thereby reduce transaction costs. PRPs must pay transaction costs, such as legal and investigative costs, as part of the expenditures involved in cleaning up a site. PRPs frequently incur high transaction costs when settlement efforts to allocate clean-up costs are prolonged or unsuccessful.

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments

Settlement	Terms of the Settlement
Savage Municipal Water Supply New Hampshire (Region 1) Settlement: CD (CD01) for RA, and past and future costs lodged with the District Court on 04/07/94 and entered on 06/27/94 Estimated Value: $14.9 million	Three PRPs will conduct the cleanup of the site, at an estimated cost of $11 million. Also, the PRPs will pay EPA $900,000 in past response costs and $3 million for future oversight costs. To address heavy metal contamination of ground water, soil, sediment, and an on-site stream, the cleanup will include sampling to determine the extent of contamination, removal activities for highly contaminated areas, and construction of a ground-water pump-and-treat system.
Caldwell Trucking Company New Jersey (Region 2) Settlement: CD (CD02) for RA including natural resource restoration, payment for natural resource damages, assessment and monitoring costs, and past and future costs lodged with the District Court on 03/31/94 Estimated Value: $35.5 million	Nine PRPs will perform cleanup of ground water contaminated with volatile organic compounds (VOCs) and work to restore natural resources, at an estimated cost of $32 million. The PRPs will also pay EPA $2.46 million for past and future response costs, and pay the State of New Jersey $1 million for natural resource damages, including the loss of an aquifer. In addition, the PRPs will pay the Department of the Interior $40,000 for its assessment and monitoring costs.
Ciba-Geigy Corporation New Jersey (Region 2) Settlement: CD (CD01) for RA, past and future response costs, and future oversight costs lodged with the District Court on 10/18/93 and entered on 04/21/94 Estimated Value: $68.4 million	Ciba-Geigy Corporation will perform a $60 million cleanup of contaminated ground water, reimburse EPA $8.4 million for past response costs, and pay EPA's future response costs, including oversight costs. On-site disposal of manufacturing wastes in at least 17 known or suspected areas of the 1,400-acre site contaminated soil and ground water with VOCs and heavy metals. EPA is investigating the disposal areas as part of a second operable unit.
Hooker Chemical/Ruco Polymer Corporation New York (Region 2) Settlement: UAO (UAO03) for RA issued on 06/30/94; PRPs notified EPA on 07/26/94 of their intent to comply Estimated Value: $13.25 million	In compliance with the UAO, Occidental Chemical Corporation and Ruco Polymer Corporation will sample soil to determine the extent of contamination, flush and excavate soil contaminated with VOCs and semi-volatile organic compounds (SVOCs), and install a ground-water pump-and-treat system. The estimated cost of these activities is $13.25 million. Under previous orders, the PRPs have excavated and cleaned up polychlorinated biphenyl (PCB)-contaminated soil and are investigating the extent of ground-water contamination.

51-044-31_1

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Lipari Landfill New Jersey (Region 2) Settlement: CD (CD03) for reimbursement of past response costs lodged with the District Court on 03/16/94 and entered on 04/15/94; CD (CD04) for clean up of off-site locations lodged with the District Court on 03/16/94 Estimated Value: $52.9 million CD03, $48 million CD04	In one of the largest Superfund settlements to date, Rohm & Haas, Owens-Illinois, and ManorCare agreed to reimburse EPA and the State of New Jersey $52.9 million for past response costs at the site. In a second settlement, Rohm & Haas also agreed to undertake a $ 48 million cleanup of off-site contamination. VOCs, heavy metals, and phthalates contaminated on-site soil, ground water, surface water, and sediment. EPA constructed an underground wall around the site, capped the contained area, and installed injection wells to flush out contaminated ground water, which is then treated at the site. Rohm & Haas is excavating a nearby marsh, a lake, and two streams affected by the contaminated ground water. Material from the marsh will be treated and then used in the reconstruction of the marsh.
Niagara County Refuse New York (Region 2) Settlement: *de minimis* AOC (AOC02) for past and future response costs signed on 09/23/94 Estimated Value: $794,000	Eleven *de minimis* PRPs will pay EPA nearly $794,000 for past and future response costs at the site. Individual payments are based on the volumetric shares of waste contributed to the site and include a premium for any unforeseen future costs.
Rockaway Borough Well Field New Jersey (Region 2) Settlement: CD (CD02) for RD/RA, operation and maintenance, payment of past costs, and payment of future oversight costs lodged with the District Court on 01/20/94 Estimated Value: $13.5 million	Thiokol Corporation will perform a RD for the site and undertake cleanup for a portion of the ground water known as the Klockner Plume. The estimated cost of the cleanup is $12 million. Additionally, Thiokol Corporation will reimburse EPA $1.5 million for past response and will pay EPA's future oversight costs. VOCs from three source areas, including a facility operated by Thiokol, polluted the aquifer, which is the sole source of ground water for the Rockaway Borough and surrounding communities.
Sharkey Landfill New Jersey (Region 2) Settlement: CD (CD01) for RD/RA, payment of past response costs, and payment of future oversight costs lodged with the District Court on 07/05/94 Estimated Value: $45.6 million ($1.4 million *de minimis* contribution)	At an estimated cost of $43.3 million, 31 major PRPs will perform the RD and cleanup of the site. The cleanup will include capping the landfill and installing and operating ground-water extraction systems to remove heavy metals and VOCs. In addition, the PRPs will reimburse EPA $1.75 million and the State of New Jersey $300,000 for past response costs, and pay up to $250,000 for EPA's future oversight costs. Also, twelve *de minimis* parties will contribute approximately $1.4 million toward the site clean-up costs.

51-044-31_2

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Blosenski Landfill Pennsylvania (Region 3) Settlement: UAO (UAO04) issued to 14 PRPs on 12/27/93 for RD/RA; 11 PRPs notified EPA on 01/31/94 of their intent to comply, and the remaining PRPs have resolved their liability Estimated Value: $12.5 million	In compliance with the UAO, 11 PRPs will design and build a ground-water pump-and-treat system and construct an impermeable cap over the landfill to address VOC, heavy metal, and polycyclic aromatic hydrocarbon (PAH) contamination at the site. The estimated value of this work is $12.5 million. EPA also is negotiating with the PRPs to pay $5.5 million in past response costs.
C & D Recycling Pennsylvania (Region 3) Settlement: UAO (UAO01) issued on 08/09/94 for RA; PRP notified EPA on 09/14/94 of its intent to comply Estimated Value: $9 million	In compliance with the UAO, AT&T Nassau Metals Corporation will clean up the site, at an estimated cost of $9 million. The PRP will remove, treat, and dispose of ash, soil, and sediment contaminated with heavy metals as a result of wire recovery operations at the site. The company also will conduct periodic surveys to ensure that contaminants do not migrate into ground and surface waters.
Columbia Gas Pipeline North Carolina, Kentucky, Virginia, West Virginia, Maryland, Delaware, Pennsylvania, Ohio, New York, and New Jersey (Regions 2, 3, 4, and 5) Settlement: AOC (AOC01) for RA signed on 09/23/94 Estimated Value: $15 million per year for 16 years, for a total of $250 million	Columbia Gas Transmission Company will identify and clean up contaminated sites along its 19,000-mile natural gas system, which covers 10 states in four EPA Regions. The company estimates that compliance with the order will cost $15 million a year for 16 or more years, for an estimated total cost of approximately $250 million. EPA has already identified PCB contamination at several locations along the pipeline. Also, EPA and the company negotiated a consent agreement and consent order requiring the company to pay a $4.9 million penalty for violations of Toxic Substances Control Act regulations for improperly using and disposing of PCBs.
E.I. Du Pont de Nemours and Company (Newport Landfill) Delaware (Region 3) Settlement: UAO (UAO01) issued on 04/19/94 for site RA; PRPs notified EPA of their intent to comply on 05/23/94 Estimated Value: $47.7 million	In compliance with the UAO, E.I. Du Pont de Nemours and Company and Ciba-Geigy Corporation will perform clean-up work estimated to cost $47.7 million. Work will include capping two on-site landfills, stabilizing on-site soil, cleaning up area wetlands, containing ground water on the north side of the Christiana River, dredging river sediments, and performing long-term monitoring of the wetlands and river. Waste from past Du Pont operations, including radioactive waste, was disposed of in two landfills at the site. Heavy metals and chlorinated solvents have been detected in site soil, ground water, wetland sediments, and the river.

51-044-31_3

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Occidental Chemical Corporation Pennsylvania (Region 3) Settlement: UAO (UAO01) issued on 06/23/94 for RA; PRPs notified EPA on 07/25/94 of their intent to comply Estimated Value: $11 million	In compliance with the UAO, Occidental Chemical Corporation and Bridgestone/ Firestone, Inc., will clean up the site at an estimated cost of $11 million. To address VOC-contaminated ground water, the PRPs will install and operate ground-water extraction wells and air strippers, monitor ground-water contamination levels, and excavate and backfill former waste-water lagoons.
Rentokil Virginia (Region 3) Settlement: CD (CD01) for RA and reimbursement of past response costs lodged with the District Court on 07/21/94 and entered on 09/30/94 Estimated Value: $11.3 million	Virginia Properties, Inc., will perform clean-up work valued at approximately $11 million and will reimburse EPA nearly $279,000 in past response costs. Ground water, soil, and surface water are contaminated with pentachlorophenol (PCP), creosote, copper, chromium, arsenic, and dioxin as a result of on-site disposal of chemical waste from wood preserving operations. The PRP will treat contaminated soil, place a cap over and install a slurry wall around the entire site, and construct a de-watering system underneath the cap.
Aberdeen Pesticide Dumps North Carolina (Region 4) Settlement: Two UAOs (UAO09 and UAO10) for RA issued on 06/22/94; PRPs notified EPA on 07/29/94 and 08/08/94 of their intent to comply Estimated Value: $11 million	In compliance with the two UAOs, PRPs will clean up pesticide-contaminated ground water at three of the five areas of the site used for manufacturing pesticides and disposing of pesticide waste. The estimated cost of the cleanup is $11 million.
Bypass 601 Ground Water Contamination North Carolina (Region 4) Settlement: CD (CD01) for RA and reimbursement of past response costs lodged with the District Court on 08/03/94 Estimated Value: $36.5 million	EPA reached agreement with 82 PRPs to clean up the site; the CD included a preauthorization mixed-funding agreement, a separate *de minimis* settlement, and a "de micromis" settlement. Under the mixed funding agreement, EPA will contribute up to $10.1 million, and the PRPs will contribute an estimated $32 million to clean up lead-contaminated soil and ground water. The cost of the cleanup could increase to as much as $100 million, however, depending on the amount of contaminated soil treated. In addition, the PRPs will reimburse EPA $4.5 million in past response costs.

51-044-31_4

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Smith's Farm Kentucky (Region 4) Settlement: UAO (UAO02) for RD/RA issued on 04/22/94; PRPs notified EPA on 05/25/94 of their intent to comply Estimated Value: $33 million	In compliance with the UAO, 10 PRPs will perform RD/RA work estimated to cost $33 million. To address VOC, SVOC, and heavy metal contamination at the site, the PRPs will consolidate contaminated soil and waste, construct a leachate collection and treatment station, and cap and recontour a 35-acre landfill located at the site.
American Chemical Service, Inc. Indiana (Region 5) Settlement: *de minimis* AOC (AOC02) for past and future response costs signed on 09/27/94 Estimated Value: $27 million	In one of the largest Superfund *de minimis* settlements in terms of the number of participating parties and amount of money recovered, EPA reached agreement with 1,006 *de minimis* PRPs to reimburse EPA and the State of Indiana more than $27 million in past and future response costs, including a premium for unforeseen future costs. The settlement represents approximately 35 percent of the estimated site clean-up costs. EPA also issued a UAO on September 30, 1994, requiring major generators and some non-settling parties to implement a remedy for the site.
Motor Wheel Disposal Michigan (Region 5) Settlement: CD (CD01) for RA, reimbursement of past costs, and payment of future costs lodged with the District Court on 02/16/94 and entered on 04/22/94 Estimated Value: $40 million	Six PRPs will implement the site remedy at an estimated cost of $40 million, reimburse EPA for response costs incurred since May 26, 1992, and pay the Agency's future oversight costs. Under a 1987 AOC, PRPs conducted a site study that revealed that ground water was contaminated with VOCs. Under the CD, the PRPs will place a cap over a former waste disposal area and pump and treat the contaminated ground water.
Gulf Coast Vacuum Louisiana (Region 6) Settlement: *de minimis* AOC (AOC01) for past and future response costs signed on 09/26/94 Estimated Value: $2.3 million	Fifty-four *de minimis* PRPs will reimburse EPA more than $287,000 for past response costs and pay approximately $2.01 million for future response costs. The payment for future response costs includes a 67.5 percent premium for unforeseen future costs. EPA found that on-site disposal pits were contaminated with heavy metals and VOCs and that on-site soil was contaminated with heavy metals. EPA response actions have included removing and treating water accumulated in the disposal pits and building a containment levee to prevent run off onto adjacent farmland.

51-044-31_5

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Mosley Road Sanitary Landfill Oklahoma (Region 6) Settlement: UAO (UAO01) for RA issued on 01/28/94; the PRP notified EPA on 02/15/94 of its intent to comply; de minimis AOC (AOC02) signed on 06/13/94 Estimated value: $12 million (UAO01), $1.3 million (AOC02)	Waste Management of Oklahoma, Inc., will comply with the UAO to repair an existing clay cap on the landfill, install a landfill gas recovery system, restore near-surface ground water as a drinking water source, and monitor ground water. These actions, which are estimated to cost $12 million, focus on preventing the migration of soil contaminants (pesticides, industrial solvents, sludge, waste chemicals, and emulsions) into an underlying aquifer that serves as a high-quality drinking water source for many Oklahoma City residents. Also, 19 *de minimis* parties will contribute $1.3 million toward the Agency's past and future response costs at the site.
Petro-Chemical Systems, Inc. (Turtle Bayou) Texas (Region 6) Settlement: UAO (UAO02) for RD/RA issued on 12/22/93 to six PRPs; three PRPs notified EPA on 1/18/94 of their intent to comply Estimated value: $27 million	In compliance with this UAO, three PRPs will perform RD/RA work estimated to cost $27 million. The PRPs will field test, design, and implement a remedy for the site to address VOC- and SVOC-contaminated soil and ground water. EPA also is seeking to recover approximately $17 million for past and future response costs from a former operator and a former waste generator.
California Gulch Colorado (Region 8) Settlement: CD (CD12) for RA lodged with the District Court on 05/16/94 and entered on 08/26/94; CD (CD10) for reimbursement of past response costs and RA entered in the District Court on 12/15/93 Estimated value: $70.8 million (CD12), $1.1 million (CD10)	Under CD12, Resurrection Mining Company and ASARCO, Inc., will address all sources of contaminant releases at the site, including waste rock, mine tailings, and slag from lead smelting operations conducted in the area since the 1860s. EPA estimates that the remedial work required under this settlement will cost approximately $70.8 million, although specific clean-up actions have not yet been defined. Also, under CD10, the Denver & Rio Grande Western Railroad Company will reimburse EPA $1.1 million in past response costs and will clean up slag piles, rail works, easements, and parts of a railyard in the area.
Portland Cement (Kiln Dust #2 & #3) Utah (Region 8) Settlement: CD (CD04) for reimbursement of past and future response costs lodged with the U.S. Bankruptcy Court for the Southern District of New York on 07/11/94. Estimated Value: $18.5 million	Lone Star Industries, formerly known as Portland Cement Company of Utah, will reimburse EPA and the State of Utah approximately $18.5 million in cash and securities for past and future clean-up costs. The State of Utah plans to excavate and dispose of site wastes. Currently, the state is conducting a RI and focused FS of ground-water contamination at the site.

51-044-31_6

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Iron Mountain Mine California (Region 9) Settlement: UAO (UAO06) for RD/RA issued to three PRPs on 04/19/94; one PRP notified EPA on 05/26/94 of its intent to comply Estimated Value: $40 million	Rhone-Poulenc, Inc., has notified EPA of its intent to comply with a UAO to enhance treatment facilities for acid mine drainage. Rhone-Poulenc will modify an existing treatment plant, construct additional facilities to treat drainage from the Old #8 Mine Seep, and operate and maintain the treatment plant for 30 years. The cleanup is estimated to cost $40 million. Sulfuric acid in the mine drainage leaches an average of a ton of copper, cadmium, zinc, and other toxic metals from the Iron Mountain Mine every day. These contaminants eventually enter the Sacramento River, resulting in fish kills and chronic adverse impacts on fisheries, including the winter run of the chinook salmon.
Bunker Hill Mining & Metallurgical Idaho (Region 10) Settlement: CD (CD03) for RA and reimbursement of past and future costs with five PRPs, including two de minimis PRPs lodged with the District Court on 05/10/94; AOC (AOC07) for RD issued on 07/19/94 Estimated Value: $48 million (CD03) ($1.23 million de minimis contribution), $2 million (AOC07)	PRPs have begun RD work valued at an estimated $2 million and will undertake cleanup valued at $40 million to address heavy metal contamination at the site. Also, the PRPs will pay up to $8 million for EPA's past costs and the cost of oversight by EPA and the State of Idaho. Two de minimis PRPs involved in the clean-up settlement will pay $1.23 million to the other three settling PRPs. The PRPs will remove and replace the top layer of lead-contaminated soil from approximately 1,350 residential yards, commercial properties, and rights-of-way. The PRPs also will close all existing water wells in the Main Valley Aquifer and any other contaminated wells. In addition, the PRPs will finance an institutional controls program to support property owners in protecting the clean soil covers, educate the community about the control measures being put in place, provide health intervention, and provide loans to residents to use in acquiring high-efficiency vacuums for controlling dust within their homes.

51-044-31_7

Exhibit 5.2-4
Highlights of Successful Enforcement Accomplishments, cont.

Settlement	Terms of the Settlement
Commencement Bay Nearshore/Tideflats Washington (Region 10) Settlement: Two AOCs (AOC09 and AOC10) for pre-RD and RD signed on 11/29/93 and 03/23/94 Estimated Value: $6 million (AOC09), $3.7 million (AOC10)	Through two AOCs, PRPs will conduct design work for the cleanup of three waterways at the site. The waterways are contaminated with a variety of organic and inorganic pollutants as a result of 100 years of industrial activity. Six PRPs will conduct pre-RD sampling and analysis to select a waste disposal site and develop a comprehensive remediation plan for the Hylebos Waterway, which is contaminated with metals and high concentrations of PCBs, in addition to organic and inorganic pollutants. The estimated value of this work is $6 million. The City of Tacoma will design the sediment cleanup for the Thea Foss and Wheeler Osgood Waterways, which are part of the city's waterfront and the focus of its long-term revitalization and development plans. The estimated value of this work is $3.7 million.
Queen City Farms Washington (Region 10) Settlement: CD (CD01) for RA and reimbursement of past and future response costs entered in the District Court on 09/09/94 Estimated Value: $22.5 million	The Boeing Company will perform clean-up activities estimated to cost $22 million, reimburse EPA more than $566,000 for its past response costs, and reimburse EPA for its future oversight costs. Ground water and surface water at the site are contaminated with VOCs, and the soil is contaminated with PCBs and metals. Boeing will remove liquid waste from, and construct a vertical barrier around, a previously capped area to prevent contaminants from entering the ground water, remove 10,000 cubic yards of soil and debris from the site, and conduct long-term ground- and surface-water monitoring. If these measures are not successful, Boeing also may extract and treat contaminated ground water.

51-044-31_8

Alternative Dispute Resolution

ADR is a tool that is used to create proposed allocations of responsibility among negotiating parties. ADR involves use of a neutral third party to organize negotiations, facilitate settlement deliberations, and provide an opinion to the parties in negotiations.

During FY94, OECA and the Offices of Regional Counsel made substantial progress toward standardizing and implementing the use of ADR mechanisms for enforcement actions. Activities included issuing guidance entitled *Final Guidance on Use of Alternative Dispute Resolution Techniques in Enforcement Action*, implementing the "ADR Act" and Executive Order on Civil Justice Reform, increasing case use of ADR mechanisms, developing case support systems, providing training and internal ADR services, and supporting outreach to the regulated community. Specific accomplishments are discussed in more detail below:

- Regional offices encouraged the use of ADR mechanisms and provided ADR services at 29 sites during FY94. In particular, the Regional offices encouraged PRPs to use ADR to assist settlements. ADR mechanisms were used successfully by the Regional offices to assist enforcement negotiations for 13 civil actions. Encouraging the use of ADR as a tool for increasing the efficiency of settling future disputes, the Agency included mediation in the dispute resolution provisions of several judicial and administrative settlement documents.
- Region 1 assumed responsibility for developing standard ADR use and consideration procedures in civil actions. Region 1 used ADR in six cost recovery and RD/RA actions. Regions 2 and 3 used ADR professionals to obtain agreement on major *de minimis* settlements involving over 1,000 parties. A pilot on the use of arbitration to resolve Superfund cost recovery cases resulted in the drafting of proposed case selection criteria and hearing procedures.
- As part of the Superfund administrative improvements effort, Regional offices participated in two pilots supporting the use of ADR professionals in private allocation disputes at Superfund sites. The highly successful pilots explored the use of ADR to support both non-binding and binding allocation methods.
- The Headquarters ADR liaison and various Regional ADR contacts provided assistance to EPA Headquarters and DOJ staff in drafting the allocation and ADR provisions of the proposed Superfund Reform Act of 1994. As a result of these activities, the Agency developed a comprehensive model for the use of allocation procedures to resolve allocation and settlement disputes at Superfund sites.
- EPA Headquarters worked with DOJ and the Regional offices to develop an innovative ADR strategy to increase the use of ADR in program operating procedures. Innovations include the inclusion of information on ADR use in pre-referred negotiation documents and participation of ADR-knowledgeable staff in case and docket reviews.
- All Regional offices and EPA Headquarters had training on the effective use of mediation and other ADR techniques during FY94. The training was designed for legal and program staff who participate in enforcement settlement activities. Training also was provided to several state environmental agencies.
- Progress was made during FY94 in educating the regulated community on the Agency's support for the use of ADR techniques to reduce both private and government transaction costs. The Headquarters ADR liaison, several Regional ADR contacts, and EPA management made presentations and provided training programs on effective ADR use for numerous professional and PRP organizations and several other federal agencies. In addition, in November 1993, a

national workshop explored opportunities to use ADR in increasing the effectiveness and fairness of the Superfund program.

Developing and Sharing Allocation Information

On August 12, 1994, to facilitate developing and sharing of allocation information, the Agency issued a white paper on the availability of volumetric waste information at NPL sites and its impact on site settlements. The paper contains findings from the evaluation of 554 multi-party generator/transporter NPL sites.

Guidance on Developing Allocation Methods

The Agency also conducted an assessment of currently used allocation methods and allocation implementation issues. The assessment was conducted through interviews with nine parties from across the country who conduct or participate in allocations. The results of the assessment were published in September 1994 in a report entitled, *Allocations Among Potentially Responsible Parties for the Costs of Superfund Site Cleanups*.

5.3.2 Foster More Settlements with Small-Volume Waste Contributors

To provide greater fairness for small-volume *de minimis* and "de micromis" waste contributors at Superfund sites, EPA is encouraging more, early, and expedited settlements that will reduce the transaction costs for all parties. To simplify determining a PRP's eligibility for a *de minimis* settlement and to streamline the settlement process, the Agency reduced the amount of information that a Region requires before offering a *de minimis* settlement. EPA issued guidance, *Streamlined Approach for Settlements with de minimis Waste Contributors under CERCLA Section 122(g)(1)(a)*, OSWER Directive 9834.7-ID, that provided a method for preparing payment matrices and encouraged Regions to take a more active role in facilitating a *de minimis* settlement.

The Agency also has worked with the Regions on settling with extremely small volume waste contributors ("de micromis" parties) and moving aggressively to settle with "de micromis" parties who are subject to contribution actions by major waste contributors. By using EPA's existing settlement authority in an expeditious manner, the Agency can resolve the liability of "de micromis" parties so that they may gain the full extent of contribution protection available under the statute.

In addition, the Agency continued to work on a Regional communications strategy that includes developing a model notice letter for assisting and informing *de minimis* parties about the settlement process. Effective communication with all concerned parties early in the settlement process can serve many useful functions, including limiting transaction costs and improving the possibility that a settlement offer will be accepted. The communications strategy recommends a variety of approaches to ensure successful communications with parties prior to, during, and following *de minimis* settlement negotiations. For example, EPA developed a brochure that describes the basic concepts and steps of the Superfund program and the *de minimis* settlement process. The brochure is included in mailings to *de minimis* parties, distributed at PRP meetings, and provided to elected officials as introductory information about *de minimis* settlements. The Agency also implemented a toll-free telephone information line for small-volume contributors who have questions about the settlement process.

5.3.3 Greater Fairness for Owners at Superfund Sites

When prospective purchasers of Superfund sites know of contamination prior to purchasing property, they may be liable for clean-up work under Superfund. Prospective purchasers are willing, in some instances, to conduct or finance some cleanup of the property

in return for a covenant from EPA not to sue. When an agreement for cleanup is reached between EPA and a prospective purchaser, the Agency, local communities, and the regulated community can benefit in several ways. The Agency can gain additional funding to finance cleanup at the site. The local communities and economies benefit from the redevelopment of the site, which creates jobs and returns the property to productive use. The prospective purchaser benefits by gaining access to a prime location for business, without fear of possible Superfund liability.

EPA is focusing more effort on negotiating agreements that will facilitate or assist in the re-use or development of contaminated property.

5.3.4 Evaluate Mixed-Funding Policy

The Agency uses mixed funding in situations where it is appropriate to recover less than 100 percent of the site costs from PRPs in a particular settlement. There are three types of mixed funding settlements: preauthorization (where PRPs perform the work and the Agency agrees to reimburse them for a portion of the costs), cashouts (where the PRPs fund a portion of the work that EPA performs), and mixed work (where the PRP and the Agency perform different aspects of the cleanup).

The Agency surveyed the opinions of organizations and individuals, including PRPs, regarding mixed-funding agreements. Many of those surveyed noted that the procedures and documentation required to enter into a mixed-funding settlement, or to assert a claim against the Trust Fund, are burdensome. During FY94, the Agency responded by conducting mixed-funding demonstration projects to explore options for streamlining the mixed-funding decision-making process, and the application and documentation requirements.

To evaluate the mixed-funding demonstration projects, the Agency defined "measures of success"" These measures relate to the overall number of settlements achieved using mixed funding and the timeliness and quality of the settlement process. Where the use of mixed funding (either mixed work or preauthorization) resulted in settlement without a large expenditure of resources (such as would be expended going to trial), the pilot was considered successful. For purposes of the evaluation, settlement was defined as an agreement on the specific language of the settlement document. Based on the evaluation of demonstration projects, EPA will continue to recommend measures for streamlining preauthorization procedures and requirements.

5.3.5 Compliance Monitoring

Through ongoing oversight of PRP activities, EPA monitors PRPs' compliance with AOCs, UAOs, and CDs. EPA monitors PRP activities at sites to ensure that the activities are performed correctly and on schedule.

EPA is continuing to develop and implement procedures for increasing the effectiveness of its compliance monitoring. The Agency implemented Regional compliance tracking systems to monitor compliance with CERCLA enforcement actions/ settlements. EPA's OECA also began reviewing Regional compliance reporting measures and plans to determine whether national compliance guidelines are appropriate or necessary. OSRE began conducting a review of each Region's approach to ensure that the Regions are tracking the most appropriate indicators of compliance. Preliminary results of EPA Regional compliance monitoring reviews indicate that improved compliance monitoring procedures are increasing Regional enforcement of AOCs, UAOs, and CDs, including use of stipulated penalties.

5.3.6 Improved Effectiveness of Cost Recovery

EPA has completed several significant activities to improve its effectiveness in recovering Trust Funds expended for cleanup. Agency efforts have focused on developing more effective reports and revising the cost recovery prioritization process. The Cost Recovery Targeting Report was developed to combine CERCLA Information System planning obligations with data from the Integrated Financial

Management System to present a complete picture of the statute of limitations date and the past costs associated with each site. The Cost Recovery Targeting Report combines data from the two systems to resolve potential problems related to comparability and access to data, and to enable EPA to identify sites where the statute of limitations is near expiration. The report also presents a complete picture of past recoverable costs and the status of all past, ongoing, and planned efforts to address these costs. With the report as a tool, EPA revised the cost recovery target process to target all cases with unrecovered costs exceeding $200,000, where the statute of limitations is an issue. Under the revised process, the Regions are required to provide documentation for all cases where the statute of limitations is an issue, including those where the deadlines have expired. The revised process should help Regions to better prioritize their cost recovery work.

In other efforts, the Agency continued to work toward finalizing its proposed cost recovery rule. The rule seeks to standardize cost recovery documentation requirements, clarify statute of limitations issues, specify the types of costs that constitute recoverable indirect costs, and explain the methodology used to calculate indirect costs. As of the end of FY94, the rule was still in process.

5.3.7 Superfund Accelerated Clean-Up Model

As the Agency implemented SACM to streamline and accelerate risk reduction and cleanup at Superfund sites, it also worked to expedite Superfund enforcement activities. To support SACM, the Agency is starting earlier PRP searches, using "non-time critical" removals at PRP-lead sites, and increasing the use of AOCs for RDs. The settlement at the Columbia Gas Pipeline, highlighted in Exhibit 5.2-4, is one example of the use of a non-time-critical removal at a PRP-lead site.

The increased use of AOCs for RDs allows PRPs to initiate the RD while continuing to negotiate on the settlement (CD) for conducting the cleanup. Further, the use of the AOC for RD allows the PRPs to perfect the clean-up design prior to finalizing the settlement. During FY94, EPA issued 18 AOCs for RDs.